U. S. FOREST SERVICE

RESEARCH NOTE NC-86

NORTH CENTRAL FOREST EXPERIMENT STATION, FOREST SERVICE—U.S. DEPARTMENT OF AGRICULTURE

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Lake States Pulpwood Production Plummets 413,000 Cords, 1968

ABSTRACT. — This twenty-third annual report shows that the 1968 Lake States pulpwood output dropped to about 3½ million cords from about 4 million cords in 1967. Michigan's roundwood harvest dropped 198,000 cords in 1968, while the Wisconsin and Minnesota harvests each fell more than 125,000 cords. Pulpwood receipts fell ½ million cords below the 1967 level in Wisconsin, but remained steady in Minnesota and Michigan.
OXFORD: 861.0(77):792

Lake States pulpwood production in 1968 declined to 3,552,000 cords, 10 percent below 1967, and 17 percent below the peak year 1966 (table 1). The major cause of the lower harvest was a substantial cutback in pulpwood inventory at several Wisconsin mills. The mills reduced inventories in 1968 to cut overhead costs and prevent wood quality deterioration in the woodyards.

Year-end pulpwood inventories at Wisconsin mills were more than 10 percent of the U.S. total in every year between 1958 and 1967 (table 2). Between 1960 and 1965 the total year-end inventory for mills in the State declined more than 300,000 cords. However, at the close of 1967 Wisconsin mills had rebuilt their inventories to 995,000 cords, a 58-percent rise in 2 years and the highest carryover since 1958.

Pulpwood producers in all three States were jolted by the 1968 inventory adjustments, because Wisconsin is a large net importer of pulpwood from Michigan and Minnesota. Michigan's roundwood harvest dropped 198,000 cords in 1968, while Wisconsin and Minnesota harvests each fell more than 125,000 cords.

Part of the decline in roundwood cut was due to substitution of residues for roundwood. Roundwood (including chips from roundwood) constituted 93 percent of the 1968 Lake States pulpwood output; mill residues, such as chips, slabs, and veneer cores, made up the remaining 7 percent. In 1967 only 5 percent of the pulpwood output came from residues. The residue proportion of the pulpwood output will probably continue to increase as more sawmills and veneer mills install debarkers and chippers.

Aspen, the major pulpwood species in the Lake States, accounted for about half of the total decline of 457,000 cords in the region's 1968 roundwood harvest. Most of the decrease in aspen cut occurred in Wisconsin and Michigan. These States also accounted for most of the 105,000-cord drop in miscellaneous hardwoods cut. Spruce pulpwood output fell 99,000 cords in 1968, with three-fifths of the decrease in Minnesota.

During 1968 Lake States pulpmills received 4 million cords of pulpwood, 467,000 cords less than in 1967. Receipts were down ½ million cords in Wisconsin, unchanged in Michigan, and up 35,000 cords in Minnesota. The Lake States supplied 88 percent of the pulpwood, western States 6 percent, and Canada 6 percent (table 3).

In reducing pulpwood inventories, Wisconsin mills procured 205,000 cords less in Michigan, 133,000 cords less in Minnesota, and 129,000 cords less locally in 1968 than in 1967. By contrast, Michigan and Minnesota pulpmills procured more local wood than in 1967.

Table 1.—Production and imports of pulpwood, Lake States, 1968

Species and destination	Production by States[1]				Imports			Total receipts
	Minnesota	Wisconsin	Michigan	Regional total	Other U.S.[2]	Canada	Total imports	
Aspen								
Minnesota	554,866	9,238	--	564,104	--	11,810	11,810	575,914
Wisconsin	27,482	616,638	215,580	859,700	--	125	125	859,825
Michigan	32	3,257	323,615	326,904	--	982	982	327,886
Exported[3]	444	--	1,111	1,555	--	--	--	--
Total	582,824	629,133	540,306	1,752,263	--	12,917	12,917	1,763,625
Balsam fir								
Minnesota	33,020	--	--	33,020	--	104	104	33,124
Wisconsin	10,092	50,865	39,466	100,423	--	11	11	100,434
Michigan	--	--	20,282	20,282	--	14,428	14,428	34,710
Exported[3]	63	--	1,804	1,867	--	--	--	--
Total	43,175	50,865	61,552	155,592	--	14,543	14,543	168,268
Birch								
Minnesota	145	--	--	145	--	--	--	145
Wisconsin	223	56,760	2,035	59,018	--	--	--	59,018
Michigan	--	--	10,651	10,651	--	--	--	10,651
Exported[3]	200	--	--	200	--	--	--	--
Total	568	56,760	12,686	70,014	--	--	--	69,814
Hemlock								
Minnesota	--	--	--	--	--	--	--	--
Wisconsin	--	43,876	42,346	86,222	--	--	--	86,222
Michigan	--	--	3,096	3,096	--	--	--	3,096
Total	--	43,876	45,442	89,318	--	--	--	89,318
Pine								
Minnesota	157,473	--	--	157,473	--	48,223	48,223	205,696
Wisconsin	43,642	199,335	72,038	315,015	82,468	7,626	90,094	405,109
Michigan	--	--	133,178	133,178	--	--	--	133,178
Exported[3]	1,552	--	--	1,552	--	--	--	--
Total	202,667	199,335	205,216	607,218	82,468	55,849	138,317	743,983
Spruce								
Minnesota	89,070	--	--	89,070	350	2,950	3,300	92,370
Wisconsin	50,614	10,826	22,016	83,456	223	116,582	116,805	200,261
Michigan	--	--	14,879	14,879	--	45,988	45,988	60,867
Exported[3]	17,451	--	2,127	19,578	--	--	--	--
Total	157,135	10,826	39,022	206,983	573	165,520	166,093	353,498
Tamarack								
Minnesota	12	--	--	12	--	--	--	12
Wisconsin	25,687	4,652	2,240	32,579	--	--	--	32,579
Michigan	--	--	--	--	--	--	--	--
Total	25,699	4,652	2,240	32,591	--	--	--	32,591
Misc. hardwoods								
Minnesota	21,348	--	--	21,348	--	5,820	5,820	27,168
Wisconsin	1,160	180,779	23,049	204,988	--	--	--	204,988
Michigan	--	--	147,300	147,300	50	--	50	147,350
Exported[3]	--	4,133	1,111	5,244	--	--	--	--
Total	22,508	184,912	171,460	378,880	50	5,820	5,870	379,506
Total roundwood								
Minnesota	855,934	9,238	--	865,172	350	68,907	69,257	934,429
Wisconsin	158,900	1,163,731	418,770	1,741,401	82,691	124,344	207,035	1,948,436
Michigan	32	3,257	653,001	656,290	50	61,398	61,448	717,738
Exported[3]	19,710	4,133	6,153	29,996	--	--	--	--
Total	1,034,576	1,180,359	1,077,924	3,292,859	83,091	254,649	337,740	3,600,603
Residues softwood								
Minnesota	12,777	--	--	12,777	--	--	--	12,777
Wisconsin	2,422	13,649	3,126	19,197	140,678	--	140,678	159,875
Michigan	--	--	--	--	--	--	--	--
Exported[3]	1,203	2,701	2,838	6,742	--	--	--	--
Total	16,402	16,350	5,964	38,716	140,678	--	140,678	172,652
Residues hardwood								
Minnesota	31,086	13,201	--	44,287	1,140	--	1,140	45,427
Wisconsin	4,473	81,060	32,340	117,873	--	--	--	117,873
Michigan	--	834	48,733	49,567	6,574	--	6,574	56,141
Exported[3]	--	5,736	2,643	8,379	--	--	--	--
Total	35,559	100,831	83,716	220,106	7,714	--	7,714	219,441
All wood material								
Minnesota	899,797	22,439	--	922,236	1,490	68,907	70,397	992,633
Wisconsin	165,795	1,258,440	454,236	1,878,471	223,369	124,344	347,713	2,226,184
Michigan	32	4,091	701,734	705,857	6,624	61,398	68,022	773,879
Exported[3]	20,913	12,570	11,634	45,117	--	--	--	--
Total	1,086,537	1,297,540	1,167,604	3,551,681	231,483	254,649	486,132	3,992,696

[1] Vertical columns of figures under box heading "Production by States" present the amount of pulpwood cut in each State.

[2] Mostly western States.

[3] Pulpwood shipped to mills outside of region.

Table 2. — Year-end pulpwood inventories at Wisconsin and United States mills, 1958 to 1967

Year	Inventory		Wisconsin percent of total
	Wisconsin	United States	
	Thousand cords	Thousand cords	
1958	1,038	5,942	17.5
1959	931	5,173	18.0
1960	947	5,984	15.8
1961	837	5,515	15.2
1962	762	5,266	14.5
1963	780	4,732	16.5
1964	743	4,843	15.3
1965	628	5,923	10.6
1966	757	6,529	11.6
1967	995	6,825	14.6
Average	842	5,673	14.8

Source: U.S. Department of Commerce 1959-1969, Pulp, Paper, and Board, Current Industrial Reports, Series M26A-13.

Lake States pulpwood imports from other States (primarily western States) remained high, but Canadian wood imports fell 13 percent from 1967. Regional imports (12 percent of the total wood received) have been shifting from Canada to western States in recent years as shown below:

Year	*From other (primarily western) States* (thousand cords)	*From Canada* (thousand cords)
1960	82	347
1961	44	303
1962	108	205
1963	153	309
1964	135	270
1965	137	297
1966	190	330
1967	239	293
1968	231	255

If this trend continues, imports from western States will exceed those from Canada in a year or two. Almost two-thirds of the pulpwood from other States was mill residues in 1968; all of the Canadian imports were roundwood.

Table 3. — Geographic origin and destination of pulpwood received by Lake States mills, 1968

Species	Percent of pulpwood originating from:					Percent of pulpwood received by mills in:		
	Minn.	Wis.	Mich.	Canada	Other U.S.	Minn.	Wis.	Mich.
Aspen	33	36	30	1	--	33	49	18
Balsam fir	26	30	35	9	--	20	60	20
Birch	1	81	18	--	--	*	85	15
Hemlock	--	49	51	--	--	--	97	3
Pine	27	27	28	7	11	28	54	18
Spruce	40	3	10	47	*	26	57	17
Tamarack	79	14	7	--	--	*	100	--
Misc. hardwoods	6	48	45	1	--	7	54	39
Residues	13	28	21	--	38	15	71	14
All wood material	27	32	29	6	6	25	56	19
Previous year (1967)	27	32	30	6	5	22	61	17

*Less than 1/2 of 1 percent.

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